

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO But 1450 Alexandra, Virginia 22313-1450 www.waybo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,004	08/01/2008	Gianni Collina	124-189USFE6159	8569
74275 7590 04/11/2011 DILWORTH IP, LLC 2 CORPORATE DRIVE, SUITE 206			EXAMINER	
			WRIGHT, SONYA N	
TRUMBULL, CT 06611			ART UNIT	PAPER NUMBER
			1762	
			MAIL DATE	DELIVERY MODE
			04/11/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.	Applicant(s)	
	, it is a second of	
10/584,004	COLLINA ET AL.	
Examiner	Art Unit	
SONYA WRIGHT	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MALLING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CPH 13(d). In or event, however, may a reply be timely filed after SX (ii) MCNTH'S from the making date of this communication. This communication is supported by the communication of the com
Status
1) Responsive to communication(s) filed on 07 February 2011. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Disposition of Claims
4) Claim(s) 13-16 and 18-27 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 13-16 and 18-27 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.
Application Papers
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on itsizer: a consider an examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d of 1).  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.

Attaciment(s)	
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Fatent Drawing Review (FTO-948)	Paper Ne(s)/Mail Date
Information Disclosure Statement(s) (PTO/SB/08)	<ol><li>Notice of Informal Patent Application</li></ol>
Paper No(s)/Mail Date	6) Other:

#### DETAILED ACTION

This action is in response to applicant's amendment filed February 7, 2011.

Claim 27 has been added. Claims 13-16 and 18-27 are now pending. The rejection in the previous office action is maintained.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Application/Control Number: 10/584.004

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 395 083 Sacchetti et al.

Claim 25

Sacchetti et al. teach catalyst components for polymerization of olefins which are particles containing titanium, optionally an electron donor, and are supported on a magnesium chloride. See Sacchetti page 2, lines 48-50. Preparation of the catalyst component consists in starting with magnesium chloride/alcohol adducts. See page 3, lines 27-29.

Sacchetti et al. teach examples of instant claim 25, when in instant claim 25, n is 2 or 3, p is as defined, and LB is EtOH or another alcohol. In instant claim 25, p is a small number, therefore, when n is 2, and LB is EtOH or another alcohol the number of moles of alcohol is essentially 2. Sacchetti et al. teach the use of 2 moles of alcohol, after dealcoholation, in page 3. lines 46-47. When n is 3 and LB is EtOH or another

alcohol, the number of moles of alcohol is essentially 3. Sacchetti et al. teach the use of 3 moles of alcohol, before dealcoholation, in page 3, lines 30-34 and in Example 1, page 6, line 40 and Examples 2-5 in pages 7-9.

#### Claim 26

Sacchetti et al. teach catalyst components for polymerization of olefins which are particles containing titanium, optionally an electron donor, and are supported on a magnesium chloride. See Sacchetti page 2, lines 48-50. Preparation of the catalyst component consists in starting with magnesium chloride/alcohol adducts. See page 3, lines 27-29.

Sacchetti et al. disclose instant claim 26 when in instant claim 26, n is 2 or 3, p is as defined, and LB is an alcohol. In instant claim 26, p is a small number, therefore, when n is 2, and LB is an alcohol the number of moles of alcohol is essentially 2. Sacchetti et al. teach the use of 2 moles of alcohol, after dealcoholation, in page 3, lines 46-47. In instant claim 26, p is a small number, therefore, when n is 3, and LB is an alcohol the number of moles of ethanol is essentially 3. Sacchetti et al. teach the use of 3 moles of alcohol, before dealcoholation, in page 3, lines 30-34 and in Example 1, page 6, line 40 and Examples 2-5 in pages 7-9.

### Claim Rejections - 35 USC § 102 or 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1762

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 13-16, 18-24 and 27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0 395 083, Sacchetti et al.

Claim 13

Sacchetti et al. teach catalyst components for polymerization of olefins which are particles containing titanium, optionally an electron donor, and are supported on a magnesium chloride. See Sacchetti page 2. lines 48-50. Preparation of the catalyst

Art Unit: 1762

component consists in starting with magnesium chloride/alcohol adducts. See page 3, lines 27-29.

Sacchetti et al. teach examples of instant claim 13, when in instant claim 13, n is 2 or 3, p is as defined, and LB is EtOH or another alcohol. In instant claim 13, p is a small number, therefore, when n is 2 and LB is an alcohol the number of moles of alcohol is essentially 2. Sacchetti et al. teach the use of 2 moles of alcohol, after dealcoholation, in page 3, lines 46-47. In instant claim 13, p is a small number, therefore, when n is 3, and LB is an alcohol the number of moles of ethanol is essentially 3. Sacchetti et al. teach the use of 3 moles of alcohol, before dealcoholation, in page 3, lines 30-34 and in Example 1, page 6, line 40 and Examples 2-5 in pages 7-9.

Sacchetti et al. do not teach the fusion enthalpy lower than 100 J/g. However, the fusion enthalpy is inherent in the invention of Sacchetti et al. The invention of Sachetti et al. contains the same components, MgCl<sub>2</sub> and an alcohol, as the invention instantly claimed. Therefore the fusion enthalpy of Sacchetti et al. would be the same as that instantly claimed.

#### Claim 14

For the p value, in Sacchetti et al., see page 3, lines 30-34 and 46-47, Example 1, page 6, line 40 and Examples 2-5 in pages 7-9. Note that in instant claim 13, from which claim 14 depends, p is a small number, therefore, when n is 2 and LB is an alcohol the number of moles of alcohol is essentially 2.

Claim 15

For the Lewis base (the alcohol, EtOH), in Sacchetti et al., see page 3, lines 30-34 and 46-47, Example 1, page 6, line 40 and Examples 2-5 in pages 7-9.

Claim 16

For methanol, propanol, and butanol, in Sacchetti et al., see page 3, lines 30-34.

Claim 18

For the catalyst component, in Sacchetti et al., see page 3, lines 27-29 for the adduct and lines 50-56 for the transition metal. titanium.

Claim 19

Sacchetti et al. teach instant claim 19 when in instant claim 19, n is 0, y is a valence of titanium, X is halogen, and R is absent. In Sacchetti et al., see page 3, lines 50-56 for the titanium compound.

Claim 20

For TiCl<sub>4</sub>, in Sacchetti et al., see page 3, lines 50-56.

Claim 21

For the electron donor, in Sacchetti et al., see page 4, lines 15-37.

Claim 22

For the electron donors ethers, esters, amines, and ketones, in Sacchetti et al., see page 4. line 18.

Claim 23

For the aluminum alkyls see page 4, lines 38-39.

Claim 24

For a teaching of polymerizing an olefin, in Sacchetti et al., see page 3, lines 7-9 and page 6, lines 1-36.

Claim 27

For a teaching of alcohols, see page 3, lines 31 and 32 in Sacchetti et al.

Sacchetti et al. discloses a small genus of alcohols and does not teach the species in instant claim 27. However, rejection is proper when the reference teaches a small genus which places a species in the possession of the public as in In re Schaumann, 572 F.2d 312, 197 USPQ 5 (CCPA 1978). The species would have been obvious even if the genus were not sufficiently small to justify a rejection under 102 because of the closely related examples of alcohols provided by Sacchetti et al. The examples of alcohols in Sacchetti are ethanol, propanol, and butanol. In Sacchetti et al., see page 3, line 33.

## Response to Arguments

Applicant's arguments filed February 7, 2011 have been fully considered but they are not persuasive. As to the rejection under 35 U.S.C. 102, applicant argues that the reference does not teach all the elements of the claims. Applicant argues that the instantly claimed Lewis Base (LB) component is missing from Sacchetti's working examples. However, Sacchetti et al. teach the use of 2 moles of alcohol (Lewis Base) in page 3, lines 46-47. Applicant further argues that Sacchetti does not disclose the coefficient "p" for the Lewis Base component. However, in instant claims 25 and 26, p

Art Unit: 1762

is a small number, therefore, when n is 2, and LB is EtOH or another alcohol, the number of moles of alcohol is essentially 2.

As to the rejection under 35 U.S.C. 102 or 103, applicant argues that Sacchetti does not teach the instantly claimed LB component. However, Sacchetti et al. teach the use of 2 moles of alcohol (Lewis Base) in page 3, lines 46-47. Applicant further argues that Sacchetti does not disclose the coefficient "p" for the Lewis Base component. However, in instant claims 25 and 26, p is a small number, therefore, when n is 2, and LB is EtOH or another alcohol, the number of moles of alcohol is essentially 2. Applicant argues that the Office Action reveals the absence of the required rationale or evidence at least tending to show that the feature of fusion enthalpy inevitably flows from the disclosures of Sacchetti. However, the fusion enthalpy is inherent in the invention of Sacchetti et al. The invention of Sachetti et al. contains the same components, MgCl<sub>2</sub> and an alcohol, as the instantly claimed adduct. Therefore the fusion enthalpy of Sacchetti et al. would be the same as that instantly claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 1762

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SONYA WRIGHT whose telephone number is (571)272-5857. The examiner can normally be reached on 8:30 am to 5:00 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/584,004 Page 10

Art Unit: 1762

/SONYA WRIGHT/ Examiner, Art Unit 1762

/David Wu/ Supervisory Patent Examiner, Art Unit 1796